

#### REMARKS/ARGUMENTS

Claims 2-4, 6-15, 17-28, and 30-37 stand rejected. In this paper, claims 3, 11-15, 20, 23-28, 33, 36, and 37 have been amended.

Applicants believe the amendments made herein add no new matter. Any amendment to the claims which has been made in this Amendment and Response, and which has not been specifically noted to overcome a rejection based on prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to be attached thereto. Reconsideration and reexamination of the application is respectfully requested in view of the amendments and the following remarks.

#### **Rejection Under 35 U.S.C. §102(b)**

Claims 2-4 and 37 stand rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.K. Patent Application Publication No. GB 2096956 of Mittelhauser. The rejection is traversed.

The claimed invention is not anticipated under §102 unless each and every element of the claimed invention is found in the prior art. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 231 USPQ 81, 90 (Fed. Cir. 1986). To anticipate, a single reference must teach each and every limitation of the claimed invention. *Eolas Technologies Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1335; 73 U.S.P.Q.2D (BNA) 1782 (Fed. Cir. 2005). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The rejection fails to satisfy these standards.

Mittelhauser '956 discloses a mirror for a vehicle comprising a mirror body 3 (i.e. a reflective element) housed in a recess within a housing comprising a front portion 5 terminating in an edge 6. The front portion 5 covers the recess. Ribs 7 within the recess cooperate with the front portion 5 to support working elements of the mirror. A closed portion 12 of the rear of the housing is attached to the ribs 7 by push buttons 13. The push buttons 13 are molded onto the closed portion 12 and inserted into apertures 15 in the ribs 7 to

hold the rear portion in place. The push buttons 13 are illustrated as mushroom shaped, and incorporate longitudinal slots to facilitate their insertion into the apertures 15.

Claim 37 has been amended, and, in pertinent part, now calls for an elongated annular neck portion tapering gradually inwardly to a flared bulb end portion, the bulb end portion having a bulb diameter greater than a diameter of the neck portion, and a circular aperture having an aperture diameter adapted for slidable registry with the neck portion and smaller than the bulb diameter, to provide a snap-fit connection when the bulb end portion is inserted through the aperture to bring the neck portion into registry with the aperture.

Claim 37 is patentable over Mittelhauser '956. Mittelhauser '956 does not disclose a connector having an elongated annular neck portion tapering gradually inwardly to a flared bulb end portion. The enlarged end is connected to a cylindrical stem. The transition from the stem to the enlarged end defines an abrupt radially extended shoulder. The stem does not taper gradually inwardly to the enlarged end. Nothing in Mittelhauser '956 even suggests that the stem of the push button is tapered to the enlarged end. This limitation of amended claim 37 is not disclosed in Mittelhauser '956.

Mittelhauser '956 also does not disclose a flared bulb end portion. The enlarged end of the pushbutton is not flared. "Flare" is defined as "A gradual widening or spreading outwards; to open or spread outwards, as the sides of a bowl, a skirt, the mouth of a horn." *The Oxford English Dictionary*, 2d Ed., Clarendon Press, Oxford (1991). The enlarged end of the pushbutton is cylindrical with a circular beveled end. No part of the enlarged end opens or spreads outwards. This "flared" limitation is not disclosed in Mittelhauser '956.

Moreover, the stem of the pushbutton in Mittelhauser '956 is not annular. A slot extends longitudinally along the stem. This slot thus precludes the stem from characterization as "annular." This limitation is not disclosed in Mittelhauser '956.

In order to support a rejection under 35 U.S.C. §102(b), Mittelhauser '956 must teach each and every limitation of the invention of amended claim 37. *Eolas Technologies Inc. v.*

*Microsoft Corp.*, 399 F.3d 1325, 1335; 73 U.S.P.Q.2D (BNA) 1782 (Fed. Cir. 2005). It does not. The identical invention must be shown in *Mittelhauser* '956 in as complete detail as is contained in amended claim 37. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). It is not. Amended claim 37 is patentable over *Mittelhauser* '956.

Since claims 2-4 depend from claim 37, they are for the same reasons patentable over *Mittelhauser* '956. Applicants request withdrawal of the rejection, and the allowance of claims 2-4 and 37.

#### **Rejection Under 35 U.S.C. §103(a)**

Claims 2-4, 6-10, and 37 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent Application Publication No. 2002/0130239 of Ishigami et al. in view of U.S. Patent No. 3,843,236 to Kurz. The rejection is traversed.

Ishigami '239 discloses an embodiment of a mirror 10 having a structure for connecting a tilt actuator support frame 12 to a front side visor cover 28B. In this embodiment, widened catching hooks 64 comprise a pair of elongated catching claws 66 attached to the visor cover 28B in cantilevered fashion. The catching claws 66 are spaced apart in a parallel orientation. Each catching claw 66 terminates in an outwardly disposed tooth. The catching hooks 64 can be inserted through rectilinear openings 24 in the frame 12 which are adapted for insertion of the catching hooks 64 to engage the sides of the openings 24 to retain the frame 12 to the visor cover 28B. It is obvious from the drawings that the catching hooks 64 are widened and generally plate-like. The description makes reference to a "pair of catching claws 66," Ishigami '239, p. 7, para. [0104]. The dissociation of the catching claws 66 comprising each catching hook 64 is explicitly borne out by the drawings and description.

According to Ishigami '239, prior art vehicle rearview mirrors have a plastic housing, referred to as a visor, comprising two pieces: a visor cover oriented toward the front of the vehicle, and a visor rim oriented toward the rear. Both the visor cover and the visor rim are

fixed to a metal frame, and form an integrated housing. The visor parts and the frame must be joined tightly together. Fastening of the visor parts to the frame is accomplished by threaded fasteners or elastic engaging claws, both of which can impose undesirable stresses on the plastic parts, leading to breakage. Specifically, the principal force between the visor rim and the frame extends longitudinally along each fastener and into the plastic part, placing areas of the plastic part associated with the fasteners and the frame into a state of tensile stress. *See, Ishigami '239, p. 1, para. [0015], [0017]; p. 5, para. [0079], [0080], [0082], [0094]*. Thus, the fastening structures of Ishigami '239 enable the mirror housing to be attached to the frame while reducing stresses on the plastic housing components.

The mirror assembly of Ishigami '239 also enables the housing components to be readily separated, thereby providing access to the interior of the mirror assembly. *Ibid., p. 2, para. [0025]; p. 6-7, para. [0097]; p. 11, para. [0148], [0149]*. Moreover, the fastening structures of Ishigami '239 enable the mirror housing components to be readily separated with relatively simple tools.

Kurz '236 discloses connectors for attaching a mirror to a padded sun visor. The connectors are attached to the mirror and are inserted into apertures 14 in the visor. One embodiment of the connectors 64 comprises a head 66, a shoulder 68, and a connecting member 70 extending between the head 66 and the shoulder 68. The head 66 comprises a retaining flange 74 defined by a tapered leading edge 72 and a tapered trailing edge 76.

The connecting member 70, analogous to the neck portion of Applicants' invention, "is a cylinder connecting head 66 with spacing shoulder 68...." *Kurz '236, col. 7, ln. 17-18*. The connecting member 70 has a diameter less than the diameter of the aperture 14. *Ibid., col. 7, ln. 19-20*

To establish a *prima facie* case of obviousness, several basic criteria must be met. Under *Graham v. John Deere*, 383 U.S. 1; 86 S. Ct. 684; 15 L. Ed. 2d 545 (1966), it is necessary to 1) determine the scope and content of the prior art; 2) ascertain the differences between the prior art and the claims at issue; 3) resolve the level of ordinary skill in the

pertinent art; and 4) evaluate evidence of secondary consideration. Additionally, the obviousness evaluation will be informed by a showing of teaching, suggestion, or motivation that would lead a person of ordinary skill in the art to combine the prior art to meet the claimed subject matter, although a rigid application of this showing is not required. The obviousness analysis must be explicit, and it is necessary to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the prior art elements in the manner claimed. *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. \_\_; 127 S. Ct 1727; 82 U.S.P.Q.2d (BNA) 1385 (2007). Secondary considerations, such as commercial success, long felt but unsolved needs, failure of others, etc., may be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. *Graham, supra*, 383 U.S. at 17-18.

The Examiner asserts that "At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to replace the rectangular connectors of Ishigami with cylindrical connectors because the substitution of one known element for another known element would have yielded predictable results to one of ordinary skill in the art." *Office action*, p. 5.

It appears that the rejection of claim 37 is based on one of the rationales set forth in the October 10, 2007, examination guidelines for determining obviousness under 35 U.S.C. §103 in view of *KSR, supra*. The guidelines identify several rationales for rejecting a claim consistent with the legal standards set out in *KSR, supra*. It appears that the selected rationale for rejecting claim 37 is "Simple Substitution Of One Known Element For Another To Obtain Predictable Results."

According to the examination guidelines, the rejection must first address the factual inquiries set out in the U.S. Supreme Court decision in *Graham v. John Deere Co.* This analysis must be factual and objective. 72 Fed. Reg. 57526, 57527 (2007).

"Office personnel must therefore ensure that the written record includes findings of fact concerning the state of the art and the teachings of the

references applied. ... [I]t may also be important to include explicit findings as to how a person of ordinary skill would have understood prior art teachings, or what a person of ordinary skill would have known or could have done. Factual findings made by Office personnel are the necessary underpinnings to establish obviousness. Once the findings of fact are articulated, Office personnel must provide an explanation to support an obviousness rejection....” *Ibid* (emphasis added).

“Any obviousness rejection should include, either explicitly or implicitly in view of the prior art applied, an indication of the level of ordinary skill. ...Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art. ... [T]he analysis supporting a rejection under 35 U.S.C. §103 should be made explicit. ...[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” 72 Fed. Reg. 57526, 57528-57529 (2007).

Once the evaluation of the *Graham* factual inquiries has been completed, the following findings must be articulated:

- (1) a finding that the prior art contained a device (method, product, etc.) which differed from the claimed device by the substitution of some components (step, element, etc.) with other components;
- (2) a finding that the substituted components and their functions were known in the art;
- (3) a finding that one of ordinary skill in the art could have substituted one known element for another, and the results of the substitution would have been predictable; and

(4) whatever additional findings based on the *Graham* factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness.

The factual analysis required by *Graham*, *supra*, *KSR*, *supra*, and the guidelines has not been completed, and thus the rejection is improper. First, the Examiner fails to address the *Graham* factual inquiries. In particular, the Examiner fails to resolve the level of ordinary skill in the pertinent art. There is no factual, objective analysis of the level of ordinary skill in the pertinent art to be found anywhere in the Office action. Indeed, the Office action fails to address the level of ordinary skill at all. Thus, the first requirement of the examination guidelines has not been met.

Second, the Office action contains no examination or investigation of the 4 required findings set out above. There has been no factual evaluation of whether the prior art contained a device which differed from the claimed device by the substitution of some components with other components. The Examiner fails to factually evaluate whether one of ordinary skill in the art could have substituted one known element for another, or whether the results of the substitution would have been predictable. There is no factual analysis of how the substitution would be accomplished, and no factual analysis of the allegedly predictable results. The Examiner has done nothing more than select 2 references providing, in combination, a laundry list of individual elements found in the claims, without providing any of the factual support for the combination required by law.

In fact, the Examiner asserts that it would be obvious to substitute cylindrical connectors for rectangular connectors because “the substitution of one known element for another known element would have yielded predictable results.” This is not a factual evaluation of whether the substitution could be made or whether the results would have been predictable. It is merely the parroting of one of the findings to be articulated, nothing more than quoting the conclusion as the rationale for reaching the conclusion. This circular reasoning cannot support the rejection.

Even if the combination of Ishigami '239 and Kurz '236 were proper, which it is not, the resulting device would not and cannot reach the invention of amended claim 37. As discussed above, amended claim 37 calls for a connector comprising, in pertinent part, an elongated annular neck portion tapering gradually inwardly to a flared bulb end portion. Neither Ishigami '239 nor Kurz '236 discloses such a fastener. Thus, the combination of Ishigami '239 with Kurz '236 cannot disclose such a fastener, and cannot reach the invention of amended claim 37. Amended claim 37 is patentable over Ishigami '239 in view of Kurz '236.

Claims 2-4 and 6-10 depend from claim 37 and, thus, call for a connector comprising an elongated annular neck portion tapering gradually inwardly to a flared bulb end portion. For the above reasons, claims 2-4 and 6-10 are patentable over Ishigami '239 in view of Kurz '236. Applicants request withdrawal of the rejection, and the allowance of claims 2-4, 6-10, and 37.

Claims 11-15, 17-28, and 30-36 stand rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Ishigami '239 in view of Published PCT Application No. WO 00/69685 of Brouwer. The rejection is traversed.

Although the rejection is framed as a combination of Ishigami '239 and Brouwer '685, the Examiner's discussion of the prior art relied upon for the rejection also includes Kurz '236. Thus, Applicants assume that the rejection is grounded in a combination of Ishigami '239, Brouwer '685, and Kurz '236.

Brouwer '685 discloses a mirror actuator assembly comprising a mirror housing frame having an actuator housing 24 and a mirror-adjusting plate 33 with mirror 34 provided therein. The actuator housing 24 comprises semi-spherical nesting shells 1, 2, 3 which can rotate in selected directions relative to each other. Located in the actuator housing 24 are drive means 35 for rotating the mirror-adjusting plate 33 with the mirror 34 relative to the mirror housing frame. The actuator housing 24 is movably connected to the mirror housing frame: the mirror plate 33 and mirror 34 are fixedly mounted on the actuator housing 24.



Thus, the mirror 34 is moved through the movement of the actuator housing 24, i.e. the nesting shells 1, 2, 3.

The Examiner cites Brouwer '685 as disclosing a tilt actuator assembly mounted to a mounting frame by a snap-fit connection. The Examiner asserts that "it would have been obvious to one of ordinary skill in the art to use snap-fit mounting means (such as those taught by Kurz) as suggested by Brouwer to mount the tilt actuator to the mounting frame in the Ishigami mirror and thereby arrive at the claimed invention. The motivation for doing this would have been to provide a low cost, easy-to-assemble mirror that does not require additional tools." *Office action*, p. 8.

As discussed above, the combination of Ishigami '239 and Kurz '236 is improper. The addition of Brouwer '685 does not remedy the improper combination of Ishigami '239 and Kurz '236. It is clear that the Examiner has simply found a reference suggesting the mounting of a tilt actuator assembly through a snap-fit connection in order to supply an element that is missing from Ishigami '239 and Kurz '236. This is the essence of improper hindsight reconstruction, rendering the asserted combination of Ishigami '239, Brouwer '685, and Kurz '236 improper and the rejection unsupported.

Furthermore, Ishigami '239 discloses the attachment of a tilt actuator mechanism to a supporting frame. Presumably, since the inventor Ishigami was occupied with the use of snap-fit connectors in a mirror assembly, the use of a snap-fit connector to attach the tilt actuator mechanism to the supporting frame could have been incorporated into the Ishigami '239 device, or at least disclosed. The absence of such a disclosure strongly suggests that the inventor perceived some problems with such a connection, or that such a connection would be undesirable or unsuitable for some reason. This weighs heavily against the existence of any rationale for combining Ishigami '239 with Brouwer '685 and Kurz '236 relative to the attachment of a tilt actuator mechanism to a supporting frame. The combination is improper, and cannot be sustained.

Even if the combination were proper, which it is not, the resulting device would not reach the invention of claims 11-15, 17-28, and 30-36. Independent claims 11 and 24 have been similarly amended and, in pertinent part, call for an annular mounting stud comprising a flared bulb end portion having a bulb diameter and an elongated annular neck portion tapering gradually inwardly to the flared bulb end. As discussed above, neither Ishigami '239 nor Kurz '236 discloses such structure. Brouwer '685 does not disclose such structure. Thus, the combination of Ishigami '239 with Brouwer '685 and Kurz '236 cannot disclose such structure, and thus cannot reach the inventions of claims 11 and 24. Claims 11 and 24 are patentable over the combination of Ishigami '239 with Brouwer '685 and Kurz '236.

Claims 12-15 and 17-23 depend from claim 11, and, thus, call for an annular mounting stud comprising a flared bulb end portion and an elongated annular neck portion tapering gradually inwardly to the flared bulb end. Claims 25-28 and 30-36 depend from claim 24, and, thus, call for an annular mounting stud comprising a flared bulb end portion and an elongated annular neck portion tapering gradually inwardly to the flared bulb end. For the above reasons, claims 12-15, 17-23, 25-28, and 30-36 are patentable over Ishigami '239 in view of Brouwer '685 and Kurz '236. Applicants request withdrawal of the rejection, and the allowance of claims 11-15, 17-28, and 30-36.

Serial No. 10/522,447  
Filed: January 19, 2005  
Page 19 of 19

Examiner: Mark J. Consilvio  
Group Art Unit: 2872

### CONCLUSION

Applicants submit that all of the claims remaining in the application are allowable over the prior art of record. Prompt notification of allowability is respectfully requested. If there are any outstanding issues which the Examiner feels may be resolved by way of telephone conference, the Examiner is cordially invited to contact the undersigned to resolve these issues.

Respectfully submitted,

REX E. BLAKEMAN ET AL.

Dated: April 7, 2008

By: /Michael F Kelly/

Michael F. Kelly, Reg. No. 50,859  
G. Thomas Williams, Reg. No. 42,228  
MCGARRY BAIR PC  
32 Market Avenue SW, Suite 500  
Grand Rapids, Michigan 49503  
616-742-3500